AMENDMENTS TO THE CLAIMS

1-6. (Canceled)

7. (Currently Amended) A passive optical network system comprising:

an optical line termination; and

a plurality of optical network units that are respectively connected to an optical line termination via an optical transmission line; wherein

the optical line termination includes

~~a database configured to store subscriber recognition information and service details in association with a subscriber,~~

an issuing unit that, upon detecting a connection with a new optical network unit while performing ~~autonomous~~ ranging, issues a control message ~~to request~~requesting a PLOAM password from the new optical network unit ~~to provide subscriber recognition information~~, and acquires the PLOAM password~~subscriber recognition information~~, and

a setting unit that, based on the acquired PLOAM password, ~~subscriber recognition information, searches the database and~~ specifies the subscriber and the service details, and performs at least one of bandwidth setting and connection setting based on specified service details, and

~~each of~~ the new optical network unit~~units~~ includes

~~a storing unit that stores subscriber recognition information input by a subscriber; and~~

a notifying unit that receives, from the optical line termination, a control message requesting ~~for~~ the PLOAM password ~~subscriber recognition information~~, and issues a response message that notifies the PLOAM password~~subscriber recognition information~~, wherein the PLAOM password is issued by a telecommunications firm.

8. (Currently Amended) The passive optical network system according to claim 7, wherein

the PLOAM password ~~subscriber recognition information is a password that~~ specifies the subscriber, and

the control messages and the response messages are sent and received using any one of a physical layer and a monitor control channel.

9. (Canceled)

10. (Currently Amended) A method for connecting a plurality of optical network units included in a passive optical network system to an optical line termination via an optical transmission line, comprising:

~~the optical line termination preparing a database that is configured to store subscriber recognition information and service details in association with a subscriber;~~

the optical line termination detecting a connection with a new optical network unit while performing ~~autonomous~~ ranging;

the optical line termination issuing a control message ~~to request~~requesting a PLOAM password from the new optical network unit ~~to provide subscriber recognition information~~, wherein the act of issuing is performed after the act of detecting;

~~each of the optical network units storing subscriber recognition information input by a subscriber;~~

~~each of~~ the new optical network unit~~units~~ receiving from the optical line termination, a control message requesting ~~for~~ the PLAOM password ~~subscriber recognition information~~;

~~each of~~ the new optical network unit~~units~~ issuing a response message including the PLOAM password~~subscriber recognition information~~;

the optical line termination ~~searching the database~~specifying, based on the acquired PLOAM password, ~~subscriber recognition information to thereby specify~~ the subscriber and the service details; and

the optical line termination performing at least one of bandwidth setting and connection setting based on the specified service details,

wherein the PLOAM password is issued from a telecommunications firm.

11. (Currently Amended) The method according to claim 10, wherein

the PLOAM password ~~subscriber recognition information is a password that~~ specifies the subscriber, and

the control messages and the response messages are sent and received using any one of a physical layer and a monitor control channel.

12. (Canceled)

13. (New) The passive optical network system according to claim 8, wherein the new optical network unit further comprises

a storing unit that stores the PLOAM password; and

the optical line termination further comprises

a database configured to store the PLAOM password and service details in association with the subscriber.

14. (New) An optical network unit used for performing the method for connecting to an optical line termination according to claim 10.

15. (New) An optical line termination for a passive optical network, connecting to a plurality of optical network units, comprising:

a physical layer termination unit transmitting to a newly activated optical unit a control message requesting a PLOAM password and acquiring the PLOAM password as a PLOAM message, the PLOAM password identifying a subscriber; and

a controller unit specifying a service allocated for the subscriber based on the acquired PLOAM password and performing bandwidth allocation corresponding to the specified service,

wherein the PLOAM password is contained in a PLOAM message belonging to a physical layer and is issued by the physical layer.

16. (New) An optical network unit for a passive optical network, connecting an optical line termination via an optical fiver, comprising:

a storing unit which stores a PLOAM password, the PLOAM password identifying a subscriber; and

a physical layer termination unit connected to the optical fiber, answering to the optical line termination during a ranging process, receiving a control message requesting the PLOAM password from the optical line termination, and sending the PLOAM password in response to the control message so that the optical network unit is registered in connection with a particular subscriber and a service allowed to the subscriber,

wherein the PLOAM password is contained in a PLOAM message and issued by a physical layer.